SUPERFUND SITE PRELIMINARY CLOSE OUT REPORT

Wayne Reclamation and Recycling
Columbia City, Indiana

I. INTRODUCTION

This Preliminary Close Out Report documents that construction activities have been completed in accordance with OSWER Directive 9320.2-3C. Construction activities at the site were conducted by the responsible parties with U.S. EPA oversight. The activities performed by the responsible parties were divided into tasks which were designed and constructed independently by the City of Columbia City and by the Non-City Settlors.

On September 22, 1994, U.S. EPA and the Indiana Department of Environmental Management (IDEM) conducted a prefinal inspection of work performed by the City of Columbia City. The prefinal inspection of work done by the Non-City Settlors was conducted on January 27, 1995. U.S. EPA determined that all responsible parties have constructed the remedy in accordance with remedial design plans and specifications. No further construction activities are anticipated, and operation of the constructed systems to achieve site completion is underway.

II. SUMMARY OF SITE CONDITIONS

Background

The Wayne Reclamation and Recycling (WRR) site, sometimes called Wayne Waste Oil, covers approximately 30 acres in the southeast part of Columbia City, Indiana. The area north of the site is commercial and residential. A cemetery borders the site on the west. The Blue River forms the south and east boundary of the site. The area across the Blue River to the south is residential, and an industrial park is under development to the east across the river. The site is partly within the 100-year floodplain of the Blue River.

Nearby residential areas are served with municipal drinking water. Two of the City's municipal water supply wells are located immediately north of the site.

WRR and its division, Wayne Waste Oil, began operating an oil reclamation business at the site in 1975. In 1976, a license to haul liquid industrial waste was granted by the Indiana Pollution Control Board. In 1980, the Indiana State Board of Health (ISBH)

began an investigation as a result of reports from a former WRR employee that hazardous wastes were being illegally disposed of at the site. ISBH determined that between February 1979 and May 1980, WRR filed hauler reports stating that it had disposed of 250,000 gallons of sludge at the Williams County Landfill in Bryan, Ohio. However, the landfill had not received any waste shipments from WRR during that time.

In 1982, WRR and one of its principals, Wayne Brockman, pleaded guilty to illegal "depositing of contaminants" and filing false hauler reports. They were required to pay a fine, to fund a risk assessment of the site, and to pay for the cleanup. WRR did not perform the cleanup required under its guilty plea.

In December 1982, the WRR site was listed on the National Priorities List (NPL).

In July 1986, approximately 100 potentially responsible parties (PRPs) entered into an Administrative Order by Consent to conduct a removal action at the site. Because this work performed from late summer 1986 to fall 1987 was not satisfactorily completed, a Unilateral Administrative Order was issued to a group of four PRPs in February 1988 (modified in March and May 1988). Work under this second order was conducted from May 1988 to March 1989.

These removal actions involved the disposal of surface and buried drums; excavation and disposal of liquids, sludges, and contaminated soil from various areas of the site; and disposal of the contents of storage tanks. The two removal actions resulted in the removal of more than 13,000 tons of material from the site.

In August 1987, U.S. EPA entered into an Administrative Order by Consent with over 100 PRPs to conduct the Remedial Investigation (RI)/Feasibility Study (FS).

The RI, completed in June 1989, documented that eight volatile organic compounds (VOCs) and two metals present in the groundwater beneath the site exceeded Maximum Contaminant Levels (MCLs). The major contaminants of concern in the groundwater are trichloroethylene (TCE) and vinyl chloride.

VOC contamination in the subsurface soils also presented a risk due to the potential for further leaching of contaminants into the groundwater. Other contaminants of concern in the soils were polynuclear aromatic hydrocarbons (PAHs), due to a risk from direct contact with surface soils, and lead, which was found at elevated concentrations in subsurface soils.

The municipal landfill on the north end of the site operated from 1953 to 1970. Although the landfill was used for disposing of municipal solid waste, some hazardous waste might also have been deposited in the landfill.

The FS was completed in January 1990.

Remedial Construction Activities

After reviewing the results of the RI/FS, U.S. EPA issued the Record of Decision (ROD) for the site in March 1990. The major components of the selected remedy included the following:

- Install an upgraded security fence around the site;
- Deed restrictions to ensure protection of the municipal landfill cap;
- Construction, operation, and maintenance of a soil vapor extraction (SVE) system in the VOC-contaminated soil areas;
- Delineate and remediate lead-contaminated soils via soil washing or immobilization/stabilization technologies;
- Monitoring of groundwater and air;
- Construction, operation, and maintenance of a groundwater extraction and treatment/discharge system;
- Delineate the extent of the municipal landfill;
- Construction and maintenance of a RCRA Subtitle D compliant cap over the municipal landfill;
- Cover PAH-contaminated soil or consolidate it under the municipal landfill cap;
- Remove and treat the contents of all above- and below-ground tanks, and delineate the extent of contamination due to spills or leaks associated with the tanks;
- Remove and dispose of site debris, including but not limited to all tanks (above-ground, below-ground, and partially buried), tanker trucks, and the incinerator.

A Consent Decree was lodged in the Northern District Court of Indiana in July 1992. Under this Consent Decree, a group of PRPs agreed to conduct the remedial design (RD) and complete the remedial action (RA).

The Consent Decree required additional studies to supplement the available technical information for design of the remedy. The additional studies confirmed a need for a passive gas venting system for the municipal landfill, and a slurry wall around the southeast area of the site was incorporated to maintain an upward gradient to prevent movement of contaminants into the lower

aquifer. Additional studies also indicated that air sparging inside the slurry wall would enhance groundwater remediation, and thus, air sparge wells were incorporated for the southeast area only. These additions were deemed simple enhancements to the selected remedy, and as such, did not require an Explanation of Significant Difference.

Also, at the time of earlier investigations, the owner was operating from the building on site; during the remedial action, several additional drums and buckets of material were discovered inside the building. Although most contained very little material, removal and proper disposal of these drums and buckets has also been addressed as part of the remedial action.

Analytical results from sampling conducted as part of pre-design investigations indicated that the subsurface lead was not leaching. With no direct contact threat and no impact to the groundwater, remediation of the lead-contaminated soils was not warranted.

Removal of surface debris on the landfill, removal of an incinerator, and removal of above ground and underground storage tanks took place in 1993, in accordance with approved work plans. The RD for the landfill (City of Columbia City) was approved in January 1994, construction began in May 1994, and construction was complete in August 1994. The RD for the remaining activities (Non-City Settlors) was approved in February 1994, construction began in June 1994, and construction was complete in June 1995. The soil vapor extraction and groundwater pump and treat systems were completed in January 1995.

During design, field studies were conducted to determine the radius of influence of the SVE wells. Modeling conducted during design indicated that the time estimated to remediate soils would be longest in the southeast area, where 5.1 years would be required. About 1 year was estimated for other areas of the site. The SVE system is expected to remedy soil contamination in accordance with established cleanup goals.

III. DEMONSTRATION OF QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) FROM CLEANUP ACTIVITIES

The Remedial Design was carefully reviewed by the Indiana Department of Environmental Management (IDEM) and the U.S. EPA for compliance with all the requirements of the ROD and applicable QA/QC procedures and protocols. A separate site-specific Quality Assurance Project Plan (QAPP) was prepared by the City of Columbia City and by the Non-City Settlors. Each of the QAPPs documented the control procedures, data validation, analytical procedures, etc. necessary to ensure that all analytical results reported were accurate. Based on a review by U.S. EPA, the QAPP was determined

to be consistent with the requirements of U.S. EPA's Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans (QAM-005/80); the Superfund Analytical Methods for Low Concentration Water for Organic Analysis dated June 1991; and the Region V Model QAPP.

The procedures outlined in the QAPP will be used to demonstrate that the various clean-up performance standards have been met for groundwater and soil. The QA/QC program documented in the QAPPs will be utilized throughout the period of compliance monitoring. Each of the QAPPs is sufficiently rigorous and was adequately complied with to enable U.S. EPA and IDEM to make the determination that all analytical results reported are accurate to the degree needed to assure satisfactory execution of the clean-up verification and monitoring portion of the Remedial Action. Any data collected is validated before it is reported to U.S. EPA and IDEM.

IV. MONITORING

The influent and effluent vapor streams to/from the off-gas treatment system will be monitored on a weekly basis for the first year of operation, and on a monthly basis thereafter.

The pretreatment system groundwater influent and effluent will be monitored bi-weekly for the first 3 months of operation, monthly from 3 months to 6 months of operation, and quarterly thereafter.

A groundwater monitoring program has been established to measure the effectiveness of the remedial action and to detect any future contamination of the municipal wells. Groundwater monitoring will also take place around the municipal landfill.

Air emissions will also be monitored to evaluate the performance of the off-gas treatment system and to measure emission levels.

All sampling and analysis procedures will be performed in accordance with the approved QAPPs.

V. ACTIVITIES AND SCHEDULE FOR SITE COMPLETION

Construction completion at the site shall be documented by the signature of this Preliminary Close Out Report. Following such documentation, joint determination shall be made by U.S. EPA and IDEM that the remedy is fully operational and functional (O&F). Pursuant to 40 CFR 300.425(f)(2), "A remedy becomes operational and functional either one year after construction is complete or when the remedy is determined concurrently by U.S. EPA and IDEM to be

functioning properly and is performing as designed, whichever is earlier." U.S. EPA and IDEM shall make a joint O&F determination based upon review and interpretation of analytical data results from influent/effluent parameters of the treatment systems.

The following activities will be completed according to the schedule below:

Deed Restrictions (Columbia City and (Non-City Settlors)	Aug. 31, 1995
Final Close Out Report	Sept. 30, 1995
Five-Year Review	May 9, 1999

Five-Year Reviews

A five-year review pursuant to OSWER Directive 9355.7-02 ("Structure and Components of Five-Year Reviews") will be required for the site. Construction began at the site on May 9, 1994, and the first five-year review will completed on or before May 9, 1999.

Long-term operation and maintenance of the remedial treatment systems will be the responsibility of the PRPs specified in the Consent Decree.

William J. Bolen, Chief
Remedial Response Section #1

Date 6/30/95